

**Remarks**

This Application has been carefully reviewed in light of the Office Action mailed May 4, 2004. Applicant elects with traverse to prosecute Claims 17-24, and has withdrawn Claims 1-16, 25, and 26. Since Applicant believes all claims are allowable without amendment, no amendments have been made except for amendments to Claim 17 to correct grammatical errors. Applicant respectfully provides these remarks.

**The Restriction Requirement is Improper**

The Examiner requires restriction to one of the following groups:

- I. Claims 1-8 and 26 drawn to a method of generating an order plan;
- II. Claims 9-16 and 25 drawn to a system of generating an order plan; and
- III. Claims 17-24 drawn to logic for generating an order plan.

Applicant respectfully traverses the restriction requirement. There are two criteria for a proper requirement for restriction between patentably distinct inventions: (1) the inventions must be independent or distinct as claimed; and (2) there must be a serious burden on the Examiner if restriction is required. M.P.E.P. § 803. Applicant respectfully submits that these two criteria have not been satisfied.

First, the inventions are neither independent nor distinct. The term "independent" means that there is no disclosed relationship between the two or more subjects disclosed, that is, they are unconnected in design, operation, or effect. M.P.E.P. § 802.01. The claims of Groups I, II, and III clearly recite substantially similar limitations. Also, the specification discloses relationships among the subjects of Groups I, II, and III. (*See, e.g.*, Page 8, Lines 1-5; Page 8, Line 12 – Page 11, Line 32) Thus, the inventions are not independent. The term "distinct" means that two or more subjects as disclosed are related, but are capable of separate manufacture, use, or sale as claimed, and are patentable, that is, novel and unobvious, over each other. M.P.E.P. § 802.01. The claims of Groups I, II, and III clearly recite substantially similar limitations. Applicant respectfully submits that the Examiner would not consider the claims of any of Groups I, II, and III to be novel and unobvious over each other. By analogy, if a prior art reference disclosed the subject matter of Claim 1 of Group I in its entirety, Applicant respectfully submits that the Examiner would not consider Claim 9 of Group II or

Claim 17 of Group III novel and unobvious over that reference. Furthermore, "If there is an express admission that the claimed inventions are obvious over each other within the meaning of 35 U.S.C. 103, restriction should not be required." M.P.E.P. § 803 (citation omitted). Applicant expressly admits that the claims of Groups I, II, and III are obvious over each other.

Second, the search and examination of the application may be made without serious burden on the Examiner since the claims of Groups I, II, and III clearly recite substantially similar limitations. "If the search and examination of an entire application can be made without serious burden, the examiner must examine it on the merits, even though it includes claims to independent or distinct inventions." M.P.E.P. § 803.

Accordingly, Applicant respectfully requests reconsideration and withdrawal of the restriction requirement. Applicant preserves the right to petition the restriction requirement if the restriction requirement is made final.

**The Claims are Allowable over *Kennedy* and *Milne***

The Examiner rejects Claims 17-24 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 6,047,290 to Kennedy et al. ("*Kennedy*") in view of U.S. Patent 6,049,742 to Milne et al. ("*Milne*"). Applicant respectfully disagrees.

**A. Independent Claim 17**

**1. The proposed *Kennedy-Milne* combination fails to meet limitations recited in independent Claim 17**

*Kennedy* fails to disclose, teach, or suggest numerous limitations specifically recited in Applicant's independent Claim 17. For example, *Kennedy* fails to disclose, teach, or suggest at least the following limitations specifically recited in independent Claim 17:

for *each priority level*:

for *each item request of a priority level*:

*plan an order for an item request of a current priority level according to a plurality of recorded unplannable network components, an unplannable network component being unable to satisfy an item request;*  
and

*determine the unplannable network components for the current priority level;*

*validate the unplannable network components; and*

*record the validated unplannable network components for the current priority level.*

In contrast, *Kennedy* discloses first *prioritizing upstream consumer objects to reflect customer priorities during upstream planning*, and then *determining resource allocation according to the prioritized upstream consumer objects during downstream planning*. According to *Kennedy*, upstream planning involves creating consumer objects at end item buffer objects to plan customer requests. Producer objects are created at upstream buffers to supply the consumer objects. Upstream buffers may also have consumer objects, for which other producer objects are created at further upstream buffers. The process works upwards to generate an assembly of buffers. (Column 3, Lines 16-22) The *upstream consumer objects are prioritized to reflect customer priorities* of the customer requests. A consumer object that ultimately feeds a high priority customer may be given a high priority. (Column 5, Lines 36-43) Downstream planning involves determining resource allocation according to the *prioritized upstream consumer objects*. If finite resources indicate that a producer object cannot supply all of its respective consumer objects on time, the consumer objects to be supplied may be selected based on the priorities of the consumer objects. (Column 7, Lines 32-50) “The selection can be made based on criteria value priority, so that the lowest priority consumer objects are the first to be made late. The highest priority consumer objects are the most likely to be planned on time.” (Column 7, Lines 51-54)

That is, *Kennedy* discloses first *prioritizing upstream consumer objects to reflect customer priorities during upstream planning*, and then *determining resource allocation according to the prioritized upstream consumer objects during downstream planning*. *Kennedy*, however, fails to disclose, teach, or suggest selecting customer requests of a particular priority level, planning for the selected customer requests, determining unplannable producer objects for the particular priority level, and recording the producer objects as

unplannable for the particular priority level for successive iterations. Accordingly, *Kennedy* cannot disclose, teach, or suggest at least the following limitations specifically recited in independent Claim 17:

*for each priority level:*  
*for each item request of a priority level:*  
*plan an order for an item request of a current priority level according to a plurality of recorded unplannable network components, an unplannable network component being unable to satisfy an item request;*  
and  
*determine the unplannable network components for the current priority level;*

*Kennedy* similarly does not disclose, teach, or suggest, as specifically recited in independent Claim 17:

*for each priority level:*  
...  
*validate the unplannable network components; and*  
*record the validated unplannable network components for the current priority level.*

However, the Examiner relies on Official Notice as to these limitations. Specifically, the Examiner states, "The steps of validating and recording the validated . . . unplannable network components for the current priority level is deemed an old and notorious step and official notice is hereby taken thereof lending no patentable weight to the claims." (Office Action, page 4)

"It is never appropriate to rely solely on 'common knowledge' in the art without evidentiary support in the record, as the principal evidence upon which a rejection was based." M.P.E.P. § 2144.03 (citing *Zurko*, 258 F.3d 1379, 1385, 59 U.S.P.Q.2d 1693, 1697 ("[T]he Board cannot simply reach conclusions based on its own understanding or experience-or on its assessment of what would be basic knowledge or common sense. Rather, the Board must point to some concrete evidence in the record in support of these findings")). "Official notice without documentary evidence to support an examiner's conclusion is permissible only in some circumstances. While 'official notice' may be relied on, these circumstances should be rare when an application is under final rejection or action under 37

CFR 1.113. Official notice unsupported by documentary evidence should only be taken by the examiner where the facts asserted to be well-known, or to be common knowledge in the art are capable of instant and unquestionable demonstration as being well-known. As noted by the court in *In re Ahlert*, 424 F.2d 1088, 1091, 165 USPQ 418, 420 (CCPA 1970), the notice of facts beyond the record which may be taken by the examiner must be ‘capable of such instant and unquestionable demonstration as to defy dispute’” M.P.E.P. § 2144.03 (citing *In re Knapp Monarch Co.*, 296 F.2d 230, 132 U.S.P.Q. 6 (C.C.P.A. 1961)). “It would not be appropriate for the examiner to take official notice of facts without citing a prior art reference where the facts asserted to be well known are not capable of instant and unquestionable demonstration as being well-known.” M.P.E.P. § 2144.03 (emphasis in original).

Applicant traverses the Official Notice taken by the Examiner because operations to, for each priority level, “*validate the unplannable network components*” for each priority level and “*record the validated unplannable network components for the current priority level*” is neither well-known nor common knowledge in the art capable of instant and unquestionable demonstration as being well-known. If the Examiner maintains his position, Applicant further requests that the Examiner produce a reference in support of his position pursuant to M.P.E.P. § 2144.03.

The Examiner states that *Kennedy* does not disclose accessing “data describing a supply chain network comprising a plurality of network components, each network component operable to supply one or more items to satisfy an item request, but that *Milne* does disclose this. (Office Action, Page 4) Whether or not this is the case, *Milne* fails to make up for the deficiencies of *Kennedy* discussed above. *Milne* discloses a “forward-flush” algorithm that generates a feasible plan engine. (Column 5, Lines 52-55) The forward-flush algorithm does not in any way disclose, teach, or suggest the limitations missing from *Kennedy* discussed above. The Examiner has rightly not alleged that *Milne* does disclose, teach, or suggest these limitations.

Applicant respectfully notes that to establish a *prima facie* case of obviousness, three basic criteria must be met. One of these requirements is that the prior art reference (or

references when combined) *must teach or suggest all the claim limitations*. M.P.E.P. § 2142 (emphasis added); *see also* M.P.E.P. § 2143.03. “*All words in a claim must be considered* in judging the patentability of that claim against the prior art.” M.P.E.P. § 2143.03 (emphasis added). The proposed *Kennedy-Milne* combination is plainly inadequate to support the rejection of independent Claim 17.

For at least these reasons, Applicant respectfully requests reconsideration and allowance of independent Claim 17 and its dependent claims.

**2. The proposed *Kennedy-Milne* combination is improper**

Even if it would have been technologically feasible at the time of the invention to combine the teachings of *Kennedy* and *Milne*, which Applicant does not admit, the rejection would still be improper because the Examiner has not shown the required teaching, suggestion, or motivation in *Kennedy*, in *Milne*, or in knowledge generally available to those of ordinary skill in the art at the time of the invention to combine *Kennedy* with *Milne* in the manner the Examiner proposes. Independent Claim 17 is also allowable for at least this additional reason.

The question raised under 35 U.S.C. § 103 is whether the prior art taken as a whole would suggest the claimed invention taken as a whole to one of ordinary skill in the art at the time of the invention. Accordingly, even if all elements of a claim are disclosed in various prior art references, which is certainly not the case here as discussed above, the claimed invention taken as a whole cannot be said to be obvious without some reason given in the prior art why one of ordinary skill at the time of the invention would have been prompted to modify the teachings of a reference or combine the teachings of multiple references to arrive at the claimed invention.

The M.P.E.P. sets forth the strict legal standard for establishing a *prima facie* case of obviousness based on modification or combination of prior art references. “To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or combine reference

teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references where combined) must teach or suggest all the claim limitations.” M.P.E.P. § 2142, 2143. The teaching, suggestion, or motivation for the modification or combination and the reasonable expectation of success must both be found in the prior art and cannot be based on an applicant’s disclosure. *See Id.* (citations omitted). “Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art” at the time of the invention. M.P.E.P. § 2143.01. Even the fact that references *can* be modified or combined does not render the resultant modification or combination obvious unless the prior art teaches or suggests the desirability of the modification or combination. *See Id.* (citations omitted). Moreover, “To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. All words in a claim must be considered in judging the patentability of that claim against the prior art.” M.P.E.P. § 2143.03 (citations omitted).

The governing Federal Circuit case law makes this strict legal standard even more clear.<sup>1</sup> According to the Federal Circuit, “a showing of a suggestion, teaching, or motivation to combine or modify prior art references is an essential component of an obviousness holding.” *In re Sang-Su Lee*, 277 F.3d 1338, 1343, 61 U.S.P.Q.2d 1430, 1433 (Fed. Cir. 2002) (quoting *Brown & Williamson Tobacco Corp. v. Philip Morris Inc.*, 229 F.3d 1120, 1124-25, 56 U.S.P.Q.2d 1456, 1459 (Fed. Cir. 2000)). “Evidence of a suggestion, teaching, or motivation . . . may flow from the prior art references themselves, the knowledge of one of ordinary skill in the art, or, in some cases, the nature of the problem to be solved.” *In re Dembiczak*, 175 F.3d 994, 999, 50 U.S.P.Q.2d 1614, 1617 (Fed. Cir. 1999). However, the “range of sources available . . . does not diminish the requirement for actual evidence.” *Id.* Although a prior art device “may be capable of being modified to run the way the apparatus is claimed, there must be a suggestion or motivation in the reference to do so.” *In re Mills*, 916 F.2d at 682, 16 U.S.P.Q.2d at 1432. *See also In re Rouffet*, 149 F.3d 1350, 1357, 47

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<sup>1</sup> Note M.P.E.P. 2145 X.C. (“The Federal Circuit has produced a number of decisions overturning obviousness rejections due to a lack of suggestion in the prior art of the desirability of combining references.”).

U.S.P.Q.2d 1453, 1457-58 (Fed. Cir. 1998) (holding a *prima facie* case of obviousness not made where the combination of the references taught every element of the claimed invention but did not provide a motivation to combine); *In Re Jones*, 958 F.2d 347, 351, 21 U.S.P.Q.2d 1941, 1944 (Fed. Cir. 1992) (“Conspicuously missing from this record is any evidence, other than the PTO’s speculation (if that can be called evidence) that one of ordinary skill in the herbicidal art would have been motivated to make the modification of the prior art salts necessary to arrive at” the claimed invention.). Even a determination that it would have been obvious to one of ordinary skill in the art at the time of the invention to try the proposed modification or combination is not sufficient to establish a *prima facie* case of obviousness. *See In re Fine*, 837 F.2d 1071, 1075, 5 U.S.P.Q.2d 1596, 1599 (Fed. Cir. 1988).

In addition, the M.P.E.P. and the Federal Circuit repeatedly warn against using an applicant’s disclosure as a blueprint to reconstruct the claimed invention. For example, the M.P.E.P. states, “The tendency to resort to ‘hindsight’ based upon applicant’s disclosure is often difficult to avoid due to the very nature of the examination process. However, impermissible hindsight must be avoided and the legal conclusion must be reached on the basis of the facts gleaned from the prior art.” M.P.E.P. § 2142. The governing Federal Circuit cases are equally clear. “A critical step in analyzing the patentability of claims pursuant to [35 U.S.C. § 103] is casting the mind back to the time of invention, to consider the thinking of one of ordinary skill in the art, guided only by the prior art references and the then-accepted wisdom in the field. . . . Close adherence to this methodology is especially important in cases where the very ease with which the invention can be understood may prompt one ‘to fall victim to the insidious effect of a hindsight syndrome wherein that which only the invention taught is used against its teacher.’” *In re Kotzab*, 217 F.3d 1365, 1369, 55 U.S.P.Q.2d 1313, 1316 (Fed. Cir. 2000) (citations omitted). In *In re Kotzab*, the Federal Circuit noted that to prevent use of hindsight based on the invention to defeat patentability of the invention, the court requires the Examiner to demonstrate a motivation in the prior art to combine the references that are alleged to create the case of obviousness. *See id.* *See also, e.g., Grain Processing Corp. v. American Maize-Products*, 840 F.2d 902, 907, 5 U.S.P.Q.2d 1788, 1792 (Fed. Cir. 1988). Similarly, in *In re Dembiczak*, the Federal Circuit reversed a finding of obviousness by the Board, explaining again that the required evidence of such a



teaching, suggestion, or motivation is absolutely essential to avoid impermissible hindsight reconstruction of an applicant's invention:

Our case law makes clear that the best defense against the subtle but powerful attraction of hind-sight obviousness analysis is *rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references*. Combining prior art references without evidence of such a suggestion, teaching, or motivation simply takes the inventor's disclosure as a blueprint for piecing together the prior art to defeat patentability—the essence of hindsight.

175 F.3d at 999, 50 U.S.P.Q.2d at 1617 (emphasis added) (citations omitted).

Nothing in *Kennedy*, *Milne*, or knowledge generally available to those of ordinary skill in the art at the time of the invention teaches, suggests, or motivates in any way the proposed combination.<sup>2</sup> The Examiner's speculation that "it would be obvious" to one of ordinary skill in the art to combine the teachings of *Kennedy* and *Milne* to achieve Applicant's invention, in hindsight with the benefit of Applicant's claims as a roadmap for selecting portions of multiple references, is clearly insufficient under the M.P.E.P. and the governing Federal Circuit case law. Moreover, the Examiner's conclusory statement that the combination would provide "better understanding of manufacture problems downstream before they manifest" is directly at odds with the governing M.P.E.P. and Federal Circuit guidelines. The fact remains that the prior art simply fails to provide the requisite teaching, suggestion, or motivation to combine *Kennedy* with *Milne* in the manner the Examiner proposes.

For at least these additional reasons, Applicant respectfully requests reconsideration and allowance of independent Claim 17 and its dependent claims.

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<sup>2</sup> If "common knowledge" or "well known" art is being relied on to supply the required teaching, suggestion, or motivation to combine the references, Applicant respectfully requests that a reference be provided in support of this position pursuant to M.P.E.P. § 2144.03. If personal knowledge is being relied on to supply the required teaching, suggestion, or motivation to combine the references, Applicant respectfully requests that an affidavit supporting such facts be provided pursuant to M.P.E.P. 2144.03.

**B. Dependent Claims 18-24**

Dependent Claims 18-24 are allowable based at least on their dependency on independent Claim 17. Since Applicant believes he has amply demonstrated the allowability of the independent claim over the prior art, and to avoid unnecessarily burdening the record, Applicant has not provided detailed remarks concerning the dependent claims. However, Applicant remains ready to provide such remarks in a future Response or on Appeal, if appropriate. Applicant respectfully requests reconsideration and allowance of all dependent claims.

**Conclusion**

Applicant believes this case is in condition for allowance. For at least the foregoing reasons, Applicant respectfully requests full allowance of all pending claims.

If the Examiner believes a telephone conference would advance prosecution of this case in any way, the Examiner is invited to contact Christopher W. Kennerly, the Attorney for Applicant, at the Examiner's convenience at (214) 953-6812.

Applicant believes that no fees are due. However, the Commissioner is hereby authorized to charge any fees or credit any overpayments to Deposit Account No. 02-0384 of Baker Botts L.L.P.

Respectfully submitted,

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